

### **REMARKS**

Again the applicants make the amendments above and the comments herewith in response to the Office Action dated May 18, 2005. Reconsideration of the merits of this patent application is respectfully requested.

The applicants understand that the Examiner has persisted in the requirement for restriction and that Claim 27 has not been examined. That claim is listed above as withdrawn.

In the Office Action the Examiner pointed out that the application had failed to make reference at the start of the specification to the provisional application from which the applicants claimed priority. That omission has been corrected above.

Also in the Office Action the Examiner noted that the specification contained an embedded hyperlink. That hyperlink has been deleted.

The Examiner then also made objection to the specification for not using sequence ID numbers when referring to sequences in a couple of instances. Both of those instances have been corrected above.

The Examiner next made objections to the claims for being drawn to non-elected inventions. The applicants contest that assertion, because the applicants feel that the applicants are entitled to broader coverage than to a specific nucleotide sequence. Nevertheless, SEQ ID NO: 2 is now recited in the claims of the application as a measure by which to measure sequence identity of the claimed nucleotides, and hence all claims are now properly drawn to the elected invention. Claim 25 has been corrected so as that its dependency is proper.

The next grounds of rejection was that the Examiner objected to all of the claims under §112, second paragraph, for indefiniteness because the applicants referred to the gene sequence as FPA. FPA is not an abbreviation and it is, in fact, the name of the gene in question. However, since by separate amendments to the claims the applicants have added sequence identity to SEQ ID NO: 2 each of the claims of this application, it is believed that this rejection is overcome anyway. This designation, plus the functional limitation recited in each claim, does not designate all arbitrary DNA, but only those which have a certain relationship to the sequences set forth in the specification and provide a certain function. It is believed this rejection is no longer relevant.

The Examiner then applied a rejection under 35 U.S.C. §112, first paragraph for written description. The Examiner acknowledges that the applicants had possession of SEQ

ID NO: 2 and the protein encoded by it, but argues breadth of the invention. The applicants here argues that it is certainly entitled to claims which encompass SEQ ID NO: 2, but in addition the applicants have demonstrated that there are other FPA genes in plants and is entitled to breadth of the invention to provide reasonable coverage for those other genes related to those described here that can be used in the present invention. The 50% sequence identity for a nucleotide sequence is a high degree of sequence identity at the level of DNA sequence, and since the claims are also limited by function only cover those genes which have both the sequence identity and function in plants of the intended purpose, it is believed that these claims are sufficiently structural detailed to meet the requirements for patentability under 35 U.S.C. §112, first paragraph.

The Examiner also implied another rejection under §112, first paragraph on page 7 of the Office Action under the heading "Scope of Enablement." The applicants believe again that the applicants have demonstrated that there are multiple FPA genes and has provided a structural limitation which provides breadth to the invention, while providing clear notice to those with skill in the art what is within or without the scope of the present invention.

Claims 6 and 7 and 14 and 15 were rejected under §101 for non-statutory subject matter. It is believed that that rejection is being cured by specifically reciting that the inserted gene or genetic construct is carried in the seed. These seeds would now be distinguishable from seeds provided in nature, and the rejection under §101 is believed overcome by this amendment.

Similarly, on page 12 of the Office Action is a rejection as to several of the claims as anticipated by Perez et al. The Examiner argued that the claims read on any gene sequence affecting flowering. The claims now no longer read on sequences that are greatly variant from SEQ ID NO: 2, and this ground of rejection is believed no longer relevant. This sequence described by Perez is a different gene with a much different purpose and which is not encompassed within the claims of the present invention. Accordingly, this rejection is now believed obviated and should be withdrawn.

Wherefore, a reconsideration of the merits of this patent application is respectfully requested.

Application No.: 09/920,705  
Amendment dated November 16, 2005  
Reply to Office Action of May 18, 2005

A petition for extension of time is submitted herewith so that this response will be considered as timely filed. Please charge the fee to Deposit Account No. 17-0055.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Nicholas J. Seay", is written over a horizontal line.

Nicholas J. Seay  
Reg. No. 27,386  
Attorney for Applicants  
QUARLES & BRADY LLP  
P.O. Box 2113  
Madison WI 53701-2113  
TEL (608) 251-5000  
FAX (608) 251-9166